

IN THE CLAIMS

1-21. (canceled)

22. (currently amended) A method for a seamless display and analysis of dual resolution image data, said method comprising:

reviewing image data of an object at low-resolution;

performing a volumetric analysis of at least one feature of interest in the low-resolution image data;

substituting high-resolution image data of the at least one feature of interest for the analyzed low-resolution image data without operator intervention;

analyzing the high-resolution image data;

linking the low-resolution image data to the high-resolution image data;

displaying a volume rendering of the low-resolution image data;

displaying analysis results of the high-resolution image data; and

~~seamlessly toggling between a volume rendering of the low-resolution image data and~~
accessing the analysis results of the high-resolution image data from the displayed volume rendering of the low-resolution image data within a single display.

23. (previously presented) A method in accordance with Claim 22 further comprising selecting an area in the object represented by the high-resolution image data using a CAD algorithm.

24. (previously presented) A method in accordance with Claim 22 wherein the high-resolution image data is present for only the features of interest identified by a CAD algorithm.

25. (previously presented) A method in accordance with Claim 22 further comprising obtaining high-resolution image data representative of an area in an object for which high-resolution image data has not been obtained.

26-39. (canceled)

40. (currently amended) A ~~computer program embodied on a~~ computer readable medium for acquiring medical image data, ~~[[the]]~~ said computer readable medium encoded with a computer program configured to:

receive low-resolution image data;

perform a volumetric analysis of at least one feature of interest in the low-resolution image data;

substitute high-resolution image data for analyzed low-resolution image data without operator intervention;

analyze the high-resolution image data;

link the low-resolution image data to the high-resolution image data;

display a volume rendering of the low-resolution image data;

display analysis results of the high-resolution image data; and

~~seamlessly toggle between the volume rendering of the low-resolution image data and~~ access the analysis results of the high-resolution image data from the displayed volume rendering of the low-resolution image data within a single display.

41. (currently amended) A ~~computer program~~ readable medium in accordance with Claim 40, wherein said computer program is further configured to select an area in the object represented by the high-resolution image data using a CAD algorithm.

42. (currently amended) A computer ~~program~~ readable medium in accordance with Claim 40, wherein said computer program is further configured to present high-resolution data for only the features of interest identified by a CAD algorithm.

43. (currently amended) A computer ~~program~~ readable medium in accordance with Claim 40, wherein said computer program is further configured to obtain high-resolution data representative of an area in an object for which high-resolution data has not been obtained.

44. (currently amended) An imaging system comprising:

a first image data acquisition system configured to acquire medical images; and

a computer coupled to the image data acquisition system and configured to:

receive low-resolution image data;

perform a volumetric analysis of at least one feature of interest in the low-resolution image data;

substitute high-resolution image data for the analyzed low-resolution image data without operator intervention;

analyze the high-resolution image data;

link the low-resolution image data to the high-resolution image data;

display a volume rendering of the low-resolution image data;

display analysis results of the high-resolution image data; and

~~seamlessly toggle between the volume rendering of the low-resolution image data and~~ access the analysis results of the high-resolution image data from the displayed volume rendering of the low-resolution image data within a single display.

45. (previously presented) A system in accordance with Claim 44 configured to select an area in the object is represented by the high-resolution image data using a CAD algorithm.

46. (previously presented) A system in accordance with Claim 44 wherein the high-resolution image data is present for only the features of interest identified by a CAD algorithm.

47. (previously presented) A system in accordance with Claim 44 further comprising a routine for obtaining high-resolution image data representative of an area in an object for which high-resolution image data has not been obtained.